

2022 TCORF/Interdepartmental Hurricane Conference

Dvorak Analysis – world coverage

Identified needs per basin

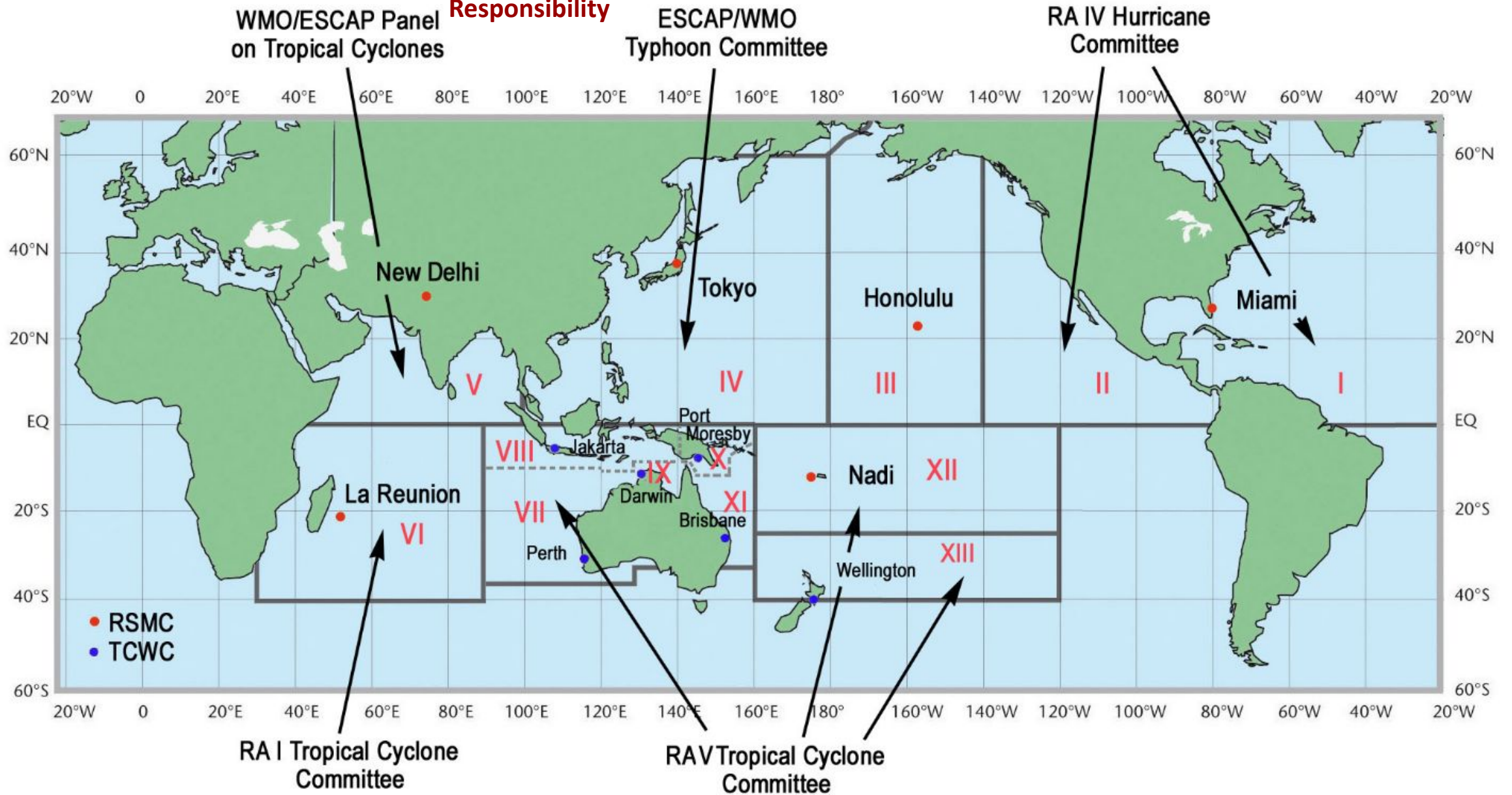
Wednesday March 9, 2022

Joel Cline

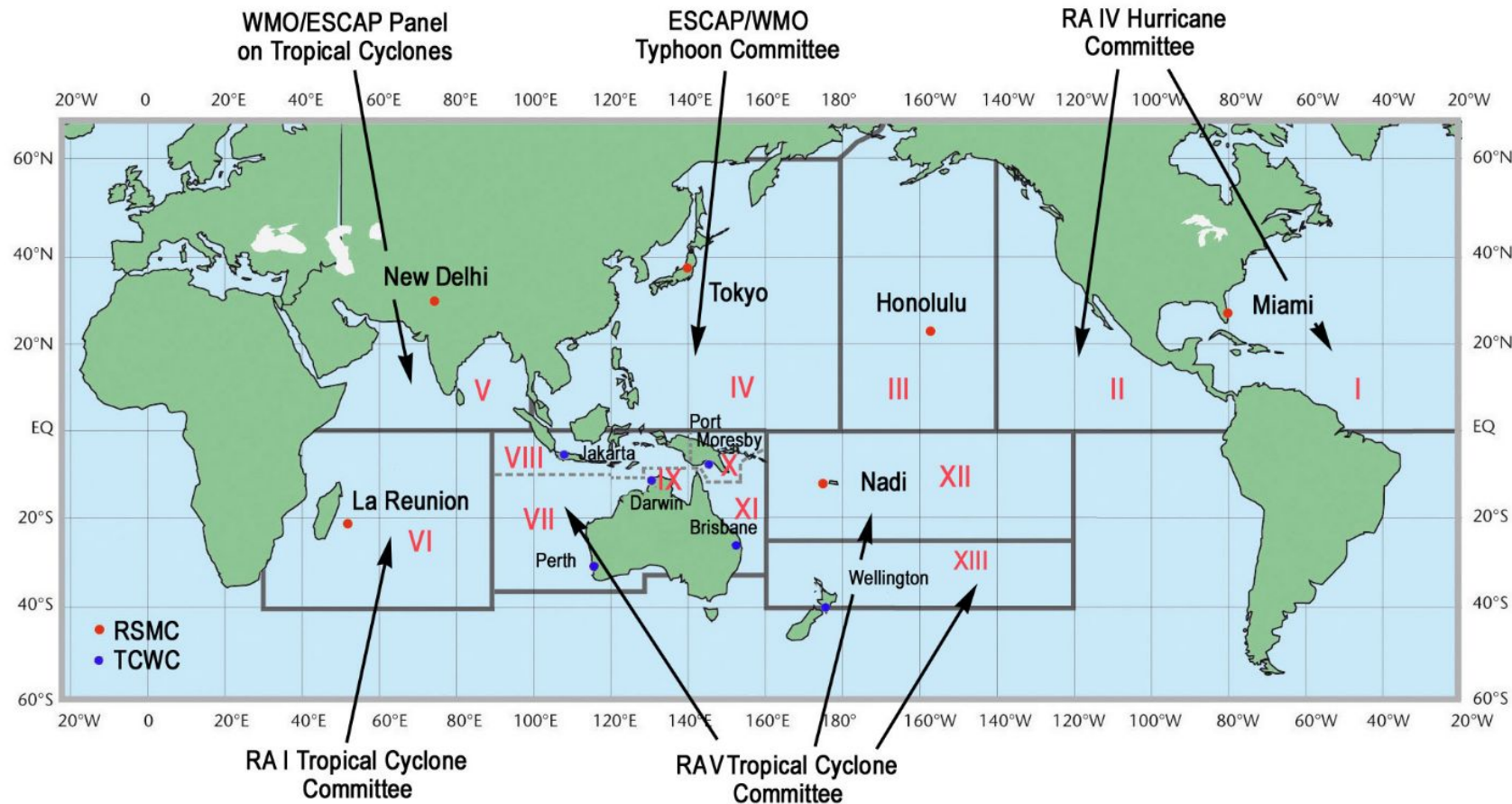
Background and Context

- **NOAA NESDIS and particularly the Satellite Analysis Branch (SAB) unit in charge of Dvorak Analysis are wanting to divest from performing the Dvorak Analysis to best align with their mission**
- **Led to a Tiger Team with NOAA NWS - National Centers, International Affairs and AFS being formed to address this change**
- **Ideas are still being examined for a path forward but the presentation will show operational requirements, existing capacity, and gaps by basin.**

WMO Regional Specialized Meteorological Centers (RSMCs) locations and Areas of Responsibility



Dvorak Analysis/Year per basin



West Pacific 1828
Southern Hemisphere 1854
East Pacific 500.6
Central Pacific 114

Total Pacific ~ 4245

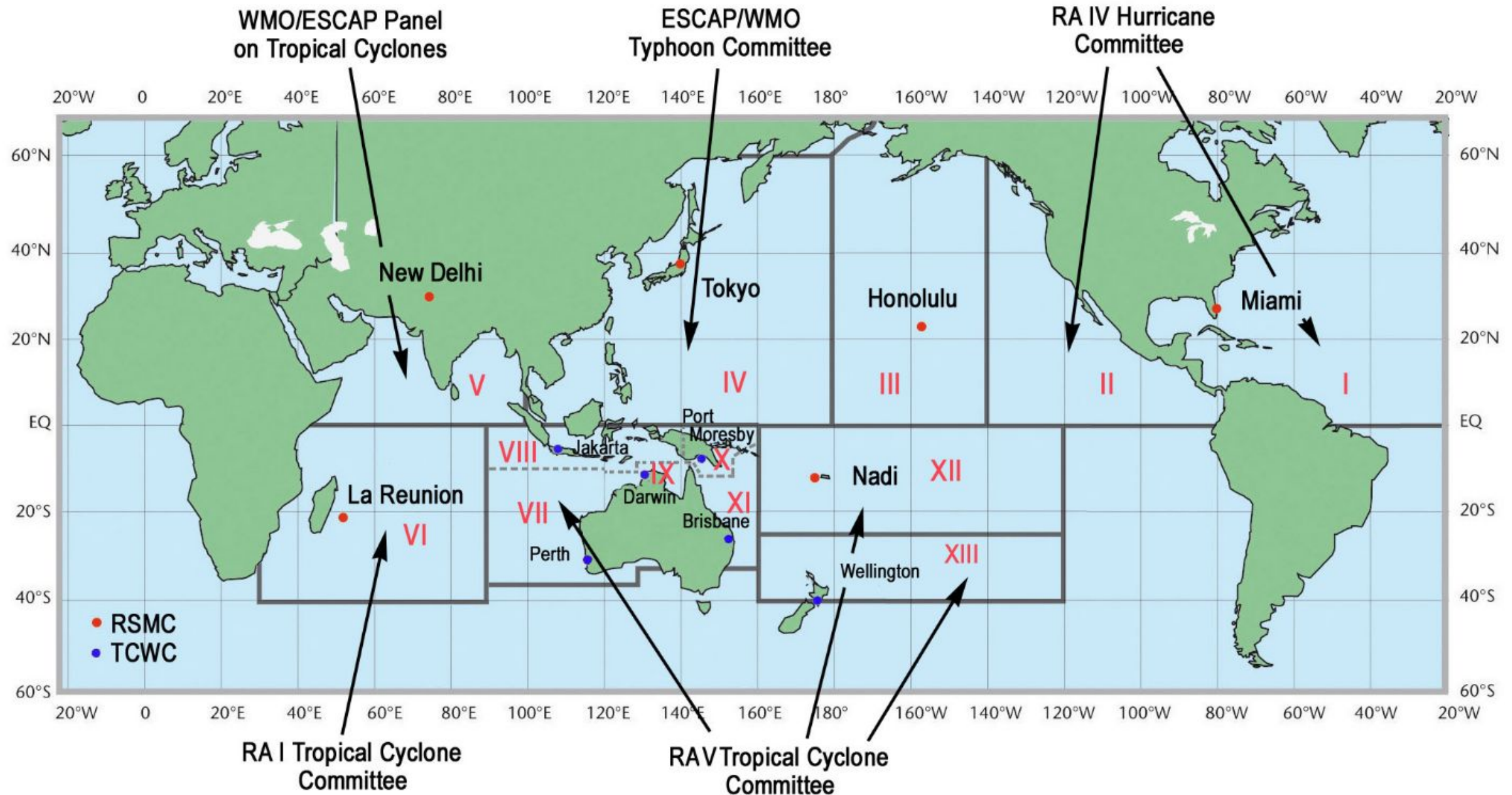
North Indian 337

Atlantic 465

**Pacific Basin accounts for
84% of all fixes**

Atlantic and North Indian
Basins = 16% combined

Closer examination per basin of operational requirements, existing capacity and gaps



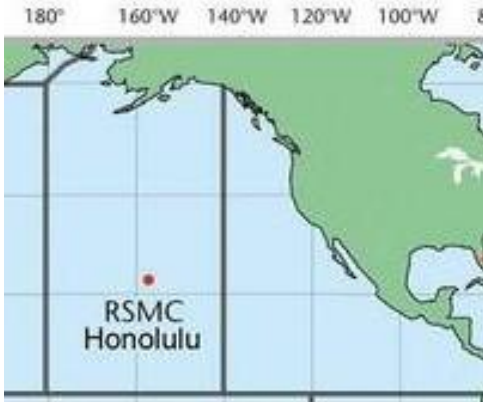
Western North Pacific



Tokyo (WMO Typhoon Committee)

- **NO. of Independent FIXES NEEDED: 3**
- Current Independent Fixes:
 - Tokyo – JMA
 - JTWC
 - **NEED ONE**

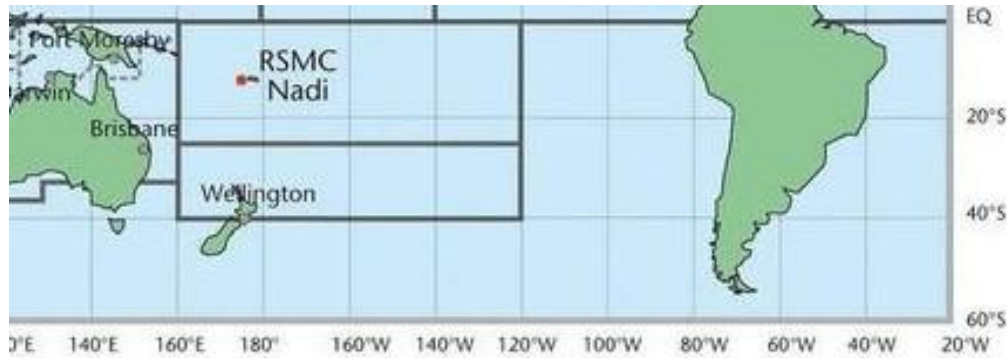
Central Pacific Basin



Honolulu

- **Number of Independent Fixes Needed: 3 (?)**
- Current Independent Fixes
 - CPHC
 - JTWC
 - **NEED ONE**

South Pacific Basin



Nadi, Fiji

- **Number of Independent Fixes Needed: 3**
- Current Independent Fixes
 - CPHC (limited areas)
 - JTWC
 - Nadi

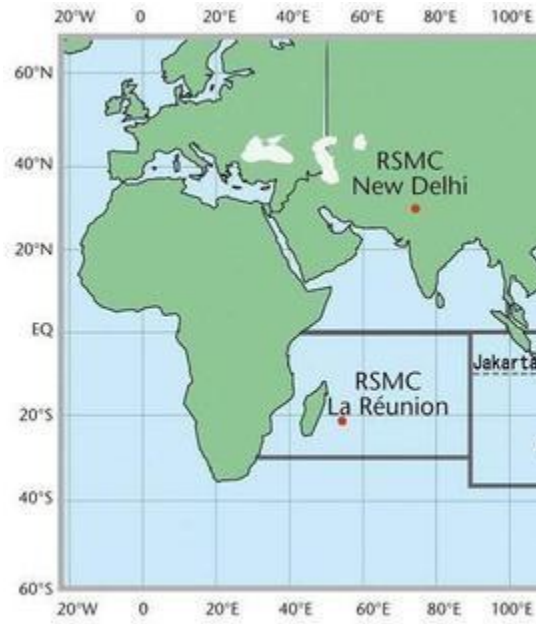
Eastern North Pacific Basin



Miami, FL

- **Number of Independent Fixes Needed: 3(?)**
- Current Independent Fixes
 - NHC
 - JTWC
 - **NEED ONE**

Indian Ocean Basin



New Delhi, La Reunion

- **Number of Independent Fixes Needed: 3**
- Current Independent Fixes
 - JTWC
 - **NEED TWO**

North Atlantic



(NHC –Miami,FL)

- **NO. of Independent FIXES
NEEDED: 2**
- Current Independent Fixes:
 - NHC
 - **NEED ONE**

The Path Forward

- A Tiger Team within NOAA continues to examine potential paths forward
- A phased approach utilizing Dvorak Analysis from other countries already performing the analysis and not transmitting over GTS to allow for coverage in the Western North and South Pacific basins is being tried.
- These will take time due to:
 - assessment of quality of observations from other countries
 - acquisition of high resolution satellite images
 - GTS headers for new Dvorak Analysis transmissions for countries coming online
 - These two ways to proceed may cover the Pacific entirely (84% or workload)
- North Atlantic and North Indian basins have the largest gaps

Dvorak Analysis – world coverage

**CONTACT INFORMATION for follow up with
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